

10/673989

IAP20 Recd PCT/PTO 30 MAR 2006

SEQUENCE LISTING

<110> Evotec NeuroSciences GmbH

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Pohlner, Johannes

<120> DIAGNOSTIC AND THERAPEUTIC USE OF A SULFOTRANSFERASE  
FOR NEURODEGENERATIVE DISEASES

<130> 2335.0140000/SRL/KPQ

<150> PCT/EP2004/052353

<151> 2004-09-29

<150> 60/506,775

<151> 2003-09-30

<160> 22

<170> PatentIn Ver. 2.1

<210> 1

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer for the  
human SULT4A1 splice variant 1 and splice variant  
2 gene

<400> 1

caaagtggtg gtcaggaggg t

21

<210> 2

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:primer for the  
human SULT4A1 splice variant 1 and splice variant  
2 gene

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<223> Description of Artificial Sequence:primer for the  
human SULT4A1 splice variant 1 gene

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<210> 4

<211> 19

<212> DNA

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<223> Description of Artificial Sequence:primer for the  
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19

<210> 5

<211> 19

<212> DNA  
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<223> Description of Artificial Sequence:primer for the  
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<210> 7  
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<223> Description of Artificial Sequence:primer for the  
human cyclophilin B gene

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<210> 8  
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<212> DNA  
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<223> Description of Artificial Sequence:primer for the  
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<223> Description of Artificial Sequence:primer for the  
human ribosomal protein S9 gene

<400> 9  
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<210> 10  
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<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:primer for the  
human ribosomal protein S9 gene

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<210> 11  
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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:primer for the  
human beta actin gene

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19

<210> 12

<211> 19

<212> DNA

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<223> Description of Artificial Sequence:primer for the  
human beta actin gene

<400> 12

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19

<210> 13

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<212> DNA

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<223> Description of Artificial Sequence:primer for the  
human GAPDH gene

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<210> 14

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<223> Description of Artificial Sequence:primer for the  
human GAPDH gene

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<210> 15  
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<223> Description of Artificial Sequence:primer for the  
human transferrin receptor TRR gene

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<220>  
<223> Description of Artificial Sequence:primer for the  
human transferrin receptor TRR gene

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<212> PRT

<213> Homo sapiens

<400> 17

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1

5

10

15

Ser Lys Tyr Phe Glu Phe His Gly Val Arg Leu Pro Pro Phe Cys Arg

20

25

30

Gly Lys Met Glu Glu Ile Ala Asn Phe Pro Val Arg Pro Ser Asp Val

35

40

45

Trp Ile Val Thr Tyr Pro Lys Ser Gly Thr Ser Leu Leu Gln Glu Val

50

55

60

Val Tyr Leu Val Ser Gln Gly Ala Asp Pro Asp Glu Ile Gly Leu Met

65

70

75

80

Asn Ile Asp Glu Gln Leu Pro Val Leu Glu Tyr Pro Gln Pro Gly Leu

85

90

95

Asp Ile Ile Lys Glu Leu Thr Ser Pro Arg Leu Ile Lys Ser His Leu

100

105

110

Pro Tyr Arg Phe Leu Pro Ser Asp Leu His Asn Gly Asp Ser Lys Val

115

120

125

Ile Tyr Met Ala Arg Asn Pro Lys Asp Leu Val Val Ser Tyr Tyr Gln

130

135

140

Phe His Arg Ser Leu Arg Thr Met Ser Tyr Arg Gly Thr Phe Gln Glu

145

150

155

160

Phe Cys Arg Arg Phe Met Asn Asp Lys Leu Gly Tyr Gly Ser Trp Phe

165

170

175

Glu His Val Gln Glu Phe Trp Glu His Arg Met Asp Ser Asn Val Leu

180

185

190

Phe Leu Lys Tyr Glu Asp Met His Arg Asp Leu Val Thr Met Val Glu  
195 200 205

Gln Leu Ala Arg Phe Leu Gly Val Ser Cys Asp Lys Ala Gln Leu Glu  
210 215 220

Ala Leu Thr Glu His Cys His Gln Leu Val Asp Gln Cys Cys Asn Ala  
225 230 235 240

Glu Ala Leu Pro Val Gly Arg Gly Arg Val Gly Leu Trp Lys Asp Ile  
245 250 255

Phe Thr Val Ser Met Asn Glu Lys Phe Asp Leu Val Tyr Lys Gln Lys  
260 265 270

Met Gly Lys Cys Asp Leu Thr Phe Asp Phe Tyr Leu  
275 280

<210> 18

<211> 171

<212> PRT

<213> Homo sapiens

<400> 18

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Gly Lys Met Glu Glu Ile Ala Asn Phe Pro Val Arg Pro Ser Asp Val  
35 40 45

Trp Ile Val Thr Tyr Pro Lys Ser Val Gly Tyr Gly Ser Trp Phe Glu  
50 55 60

His Val Gln Glu Phe Trp Glu His Arg Met Asp Ser Asn Val Leu Phe

65 70 75 80

Leu Lys Tyr Glu Asp Met His Arg Asp Leu Val Thr Met Val Glu Gln  
85 90 95

Leu Ala Arg Phe Leu Gly Val Ser Cys Asp Lys Ala Gln Leu Glu Ala  
100 105 110

Leu Thr Glu His Cys His Gln Leu Val Asp Gln Cys Cys Asn Ala Glu  
115 120 125

Ala Leu Pro Val Gly Arg Gly Arg Val Gly Leu Trp Lys Asp Ile Phe  
130 135 140

Thr Val Ser Met Asn Glu Lys Phe Asp Leu Val Tyr Lys Gln Lys Met  
145 150 155 160

Gly Lys Cys Asp Leu Thr Phe Asp Phe Tyr Leu  
165 170

<210> 19

<211> 2419

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:nucleotide  
sequence of human SULT4A1 cDNA, splice variant 1

<400> 19

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agttcgagag caagtaacttc gagttccatg gctgtccgtt gccgccttc tgccgcggga 120  
agatggagga gatcgccaaac ttcccggtgc ggcccagcga cgtgtggatc gtcacctacc 180  
ccaaagtccgg caccagcttg ctgcaggagg tggtctactt ggtgagccag ggcgctgacc 240  
ccgatgagat cggcttgatg aacatcgacg agcagctccc ggtcctggag tacccacagc 300  
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<210> 20  
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<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:nucleotide  
sequence of human SULT4A1 cDNA, splice variant 2

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agatggagga gatcgccaaac ttccccgtgc ggcccagcga cgtgtggatc gtcacctacc 180  
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<210> 21  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:nucleotide  
sequence of human SULT4A1 cDNA fragment

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gattgcatct ttaataaaaga catgttcccg gc 32

<210> 22  
<211> 855  
<212> DNA  
<213> Artificial Sequence

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<223> Description of Artificial Sequence:coding sequence  
of the human SULT4A1 gene

<400> 22  
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ctgcaggagg tggtctactt ggtgagccag ggcgctgacc ccgatgagat cggcttgatg 240  
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